

dosing. Potential initiatives to improve the proportion of patients weighed include, better staff education, a strategic approach to recording patients notes and electronic prescribing.

### THE IMPACT OF SURGICAL APPROACH ON THE ANATOMY OF ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

K. Aboelmagd, M. El-Husseiny, F.S. Haddad. *UCL Medical School, United Kingdom*

The Transtibial (TT) approach to anterior cruciate ligament (ACL) reconstruction has produced excellent clinical results, however some patients still experience persistent rotational tibial instability and graft failure. Non-anatomic femoral tunnel positioning has been associated with unsuccessful ACL reconstructions. This study compares the position and length of femoral tunnels produced from TT and Transportal (TP) approaches to ACL reconstruction.

Post-operative radiographs were obtained from 122 patients who underwent single-bundle ACL reconstruction. Two groups were assigned; Group 1 contained 80 patients who underwent TT reconstruction, Group 2 contained 42 patients who underwent TP reconstruction. Femoral tunnel angle, length and position were measured in the coronal and sagittal plane. Data analysis used the Mann Whitney U test, with  $P < 0.05$  defined as significant. Inter and intra observer reliability was determined using the intraclass correlation coefficient.

TP femoral tunnels were significantly shorter,  $p < 0.0001$ , (TP median 38.1 mm, TT median 48.44 mm), and more oblique in the coronal plane,  $p < 0.0001$ , (TP median 44.3°, TT median 58.6°). TP femoral tunnels were positioned further around the clock face,  $p < 0.0001$ , (TP median 47.1°, TT median 30.2°), and significantly more posteriorly along Blumensaat's line,  $p < 0.0001$ , (TP median 69.79%, TT median 61.64%). Sagittal plane TP tunnels were significantly more oblique,  $p < 0.0001$ , (TP median 60.8°, TT median 79°).

This study has shown that the TP approach to ACL reconstruction produces shorter and more oblique femoral tunnels positioned more posteriorly along the femoral notch compared to TT femoral tunnels.

### SURVEY OF ANTIBIOTIC PROPHYLAXIS FOR INFECTIVE ENDOCARDITIS (IE) IN UK DENTAL PRACTICES 3-YRS FOLLOWING NICE: WHAT DENTISTS DO AND WHAT PATIENTS WANT

Matilda Powell-Bowns. *Dundee Medical School, United Kingdom*

**Background:** NICE guidelines published in 2008 recommend no prophylaxis for any cardiac patient undergoing dental or non-dental manipulations except for procedures at an infected non-dental site. This is in contrary to recommendations from other international bodies.

#### Objectives:

- To evaluate compliance in UK dental practices to NICE guidelines.
- To obtain 'at-risk' patients' opinion regarding the use of IE prophylaxis.

**Methods:** 200 dental practices were randomly selected from a cohort of 5253 across eighteen UK counties. The practices received a questionnaire regarding their IE prophylaxis policy and reviewed their current practise regarding this matter.

50 pre- and post-operative patients considered to be "at-risk" by NICE underwent a telephone survey. The survey discussed current guidelines regarding IE prophylaxis and questioned patients regarding their preference.

**Results:** 46.5% dental practices responded, of which 96% reported following NICE guidelines. 46% of the respondents still prescribed prophylactic IE antibiotics. 22% of respondents correctly identified cardiac patients "at-risk".

100% of patients contacted completed the study. 52% patients felt they warranted IE prophylaxis. 74% were unaware that NICE do not recommend prophylaxis irrespective of risk. 96% of patients would prefer to have prophylaxis.

**Conclusion:** The study suggests 36 months following publication of NICE guidelines; dentists remain unsure regarding IE prophylaxis. Considering

that the majority of informed "at-risk" patients want to receive prophylaxis, there is possibly now a need to review the NICE guidelines.

### THE IMPACT OF A SINGLE SURGICAL INTERVENTION FOR PATIENTS WITH CLEFT LIP AND PALATE LIVING IN EASTERN ETHIOPIA

Matthew Fell. *Severn Foundation School (FY1), United Kingdom*

**Aims:** Humanitarian organisations commonly provide reconstructive treatment for patients with cleft lip and/or palate (CLP) in developing countries where care is otherwise unavailable. This study aimed to assess whether a single surgical intervention was sufficient to produce an observable change in the life of a patient with CLP living in rural Hararghe in eastern Ethiopia.

**Methods:** 356 patients with a cleft lip and/or palate, who received surgical treatment at least 6 months previously, were interviewed and examined in 21 rural health centres in Ethiopia.

**Results:** Cleft patients and their families expressed unhappiness before treatment, mainly because the society reacted negatively towards the deformity, isolating the patient from community activities. After the operation, the vast majority (98.5%) experienced a positive improvement in their lives. The percentage of school-aged children participating in education almost doubled (from 44% to 78%), some older patients were able to marry, but employment was unaffected. The type of cleft was the biggest factor in predicting outcome, with unilateral cleft lip patients having the best result. Bilateral cleft lip patients tended to have a good outcome but the dehiscence rate (8%) was higher than unilateral cleft lip (0.3%). Most patients were satisfied with the treatment and outcome, but 80% of patients with an unoperated cleft of the palate wanted further treatment.

**Conclusions:** This unique study has given an insight into the effectiveness of surgical treatment for cleft lip/palate patients in a rural setting in Ethiopia.

### EVALUATION OF CT UROGRAPHY AS A SECOND-LINE INVESTIGATION IN PATIENTS PRESENTING WITH VISIBLE HAEMATURIA IN THE HIGHLAND REGION

Ola Blach. *University of Aberdeen Medical School, United Kingdom*

**Background:** Visible haematuria is a cardinal symptom of urinary tract malignancy, and is commonly investigated initially with cystoscopy and ultrasonography. CT urography replaced IV urography as the second-line investigation in the Highlands in 2005 but its ability to detect significant urological pathology, not otherwise picked up by ultrasound and cystoscopy, has never been assessed.

**Design & aim:** A prospective observational study comparing the diagnostic yield of CT urography with first-line ultrasonography and cystoscopy.

**Results:** The overall sensitivity of CT urography in detection of urological pathology was 94.0% vs. 61.2% of ultrasonography. Both were highly specific: 97.5% and 96.9%, respectively. Despite the good agreement between the two tests ( $\kappa=0.612 \pm 0.059$ ,  $p < 0.001$ ), detectability of pathology was significantly higher on CT urography (McNemar:  $p < 0.001$ ), with 9.3% more 'abnormal' cases diagnosed, including 1 renal carcinoma, 2 benign renal masses, and 62% more calculi. Urothelial malignancy and hydronephrosis were equally well detected by both investigations. 225 'incidental' lesions were identified in 137/227 patients following CT urography.

**Conclusion:** The management of patients with visible haematuria was not changed significantly by the use of CT urography. Therefore, ultrasonography and cystoscopy should continue to be used as the first-line tests for identifying the source of bleeding. CT urography should be reserved as a second-line investigation for older patients, for those with additional risk factors, and for further evaluation of abnormalities detected on ultrasound or cystoscopy. One debatable benefit of CT urography lies in its detection of incidental asymptomatic pathology at the expense of additional radiation dose and higher cost.

### AN OBSERVATIONAL STUDY OF TRANSFUSION MANAGEMENT IN A CARDIAC SURGICAL UNIT IN TRINIDAD

Oliver Harrison. *Severn Foundation School, United Kingdom*

Cardiac surgery patients are amongst the biggest consumers of blood transfusions of all surgical patients. Cell salvage devices (cell savers) have helped reduce this requirement and the risks of transfusion (including infection